

**FACT SHEET FOR STATE WASTE DISCHARGE PERMIT NO. ST 6163
NATIONAL FROZEN FOODS CORPORATION RE-PACK FACILITY**

SUMMARY

National Frozen Foods Re-pack Facility is a processing plant that receives bulk frozen processed vegetables prepared at other locations, stores them until needed, and packages them in small containers for resale. The primary source of the bulk vegetables is National Frozen Foods another facility in downtown Chehalis, which is permitted separately. This fact sheet is written for the June 2005 renewal.

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST 6163. The Department of Ecology (Department) is proposing to issue this permit, which will allow discharge of wastewater to City of Chehalis Wastewater Treatment Plant. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington state law [Revised Code of Washington (RCW) 90.48.080 and 90.48.160] requires that a permit be issued before discharge of wastewater to waters of the state is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the state. Regulations adopted by the state include procedures for issuing permits and establish requirements which are to be included in the permit [Chapter 173-216 Washington Administrative Code (WAC)].

This fact sheet and draft permit are available for review by interested persons as described in Appendix A -- Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix C--Response to Comments.

GENERAL INFORMATION	
Applicant:	National Frozen Foods Corporation 188 Sturdevant Rd. Chehalis, Washington 98532
Facility Name and Address:	Re-pack Facility, 188 Sturdevant Road, Chehalis, Washington
Type of Facility:	Food Processing Plant
Facility Discharge Location:	Latitude: 46° 38' 20" N Longitude: 122° 55' 54" W
Treatment Plant Receiving Discharge:	City of Chehalis Wastewater Treatment Plant
Contact at Facility:	Name: Shannon Sauter Telephone #: (360) 748-0015
Responsible Official:	Name: Pat Sauter Title: Plant Manager Address: 188 Sturdevant Road Telephone #: (360) 748-4403 FAX #: (360) 748-1419

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

Basic Description:

This facility consists of an office building and a main building containing a five-acre freezer, a packing room and a laboratory. A There are no categorical standards that are applicable to this facility since the development document shows that re-packing was not included in the scope of the research for the development document. National Frozen Foods Repack Facility is not a significant industrial user because:

- Its average flow (12,300 gpd) is less than 25,000 gpd.
- Its average flow is less than 5% of the POTW design flow (.05 X 2,000,000 = 100,000 gpd).
- Its organic load of 84 lbs per day is less than 5% of the POTW design capacity (.05 X 555 = 145 lbs).

History:

The Plant was built in 1982 under the name of National Fruit Canning Company. The name, but not the ownership, was changed to National Frozen Foods in 1988. The frozen storage capacity of the plant was enlarged in 1991.

Industrial Processes:

Processed frozen vegetables (green peas, carrots, sweet corn, lima beans, onions) are received and stored in the frozen food storage at the plant. As the market demands, these 1,400-pound containers are removed from storage and repackaged for distribution and sold as either single or blended products. Annual production is approximately 145,000,000 pounds. Seasonal variation is small with a small increase in production and personnel during the harvest season. Operation is 16 hours per day 52 weeks out of the year with a 5 day work-week for 8 months of the year and a 6 day work-week for the remainder of the year. Best management practices that have seriously improved the wastewater treatment performance of the plant are water use reduction and the installation of a pneumatic waste removal system. The plant stores small amounts of sanitation chemicals, refrigeration chemicals (Ammonia, Ethylene glycol, propylene glycol), and 1,000 gallons of motor oil for motor vehicles. This is a permit renewal.

Treatment Processes

Wastewater from the operational area of the plant is routed to an equalization tank followed by a hydrosieve. Samples are taken at the discharge point of the hydrosieve. Screenings from the hydrosieve and other solid waste is disposed of as silage for cattle feed.

STATUS

The previous permit for this facility was issued on March 14, 2000.

An application for permit renewal was submitted to the Department on April 2, 2004, and accepted by the Department on April 27, 2004.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received a sampling inspection on March 15, 2001.

During the history of the previous permit, the Permittee has remained in compliance based on Discharge Monitoring Reports (DMRs) and other reports submitted to the Department.

WASTEWATER CHARACTERIZATION

The concentration of pollutants in the discharge was reported in the permit application and in DMRs. The wastewater discharge for the period September 2000 through December 2003 is characterized for the following parameters:

Parameter	Mean Weight
BOD ₅ , Monthly Average, lbs/day	84
BOD ₅ Daily Maximum, lbs/day	284
TSS Monthly Average, lbs/day	37
TSS Daily Maximum, lbs/day	79
Flow, gpd	12,300

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the publicly owned treatment works (POTW) (local limits). Wastewater must be treated using all known, available, and reasonable treatment (AKART) and not interfere with the operation of the POTW.

The more stringent of the local limits-based or technology-based limits are usually applied to each of the parameters of concern. In this instance, local limits for parameter concentrations are not applied because this would be inconsistent with the Permittee's efforts to conserve water. The local limits ordinance for Chehalis does allow for this exception. Each of these types of limits is described in more detail below.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

All waste discharge permits issued by the Department must specify conditions requiring available and reasonable methods of prevention, control, and treatment of discharges to waters of the state (WAC 173-216-110). Federal categorical limits for vegetable processing were set for facilities that process field-fresh, just harvested vegetables. This facility does not perform this function.

Permit limits for AKART for this permit were set using the demonstrated performance of the treatment facility. It is not possible to apply the statistical method in Chapter 6 of the Department's Permit Writers Manual and the EPA support document due to wildly fluctuating effluent characteristics caused by daily changes in market demands for various products and product mixtures.

THE FOLLOWING PERMIT LIMITATIONS ARE NECESSARY TO SATISFY THE REQUIREMENT FOR AKART:

Parameter	average monthly	maximum daily
pH, s.u.	6 to 9	6 to 9
bod ₅ lbs/day	120	467
TSS lbs/day	120	467

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

This facility does not produce any toxic chemicals that would cause pass-through pollution, treatment interference, beneficial or designated use of sludge, or potentially hazardous exposure levels, therefore no limitations on toxic substances are imposed. The Chehalis POTW has accepted the limits in the existing and proposed permits. The City's sewer ordinance limits the following.

Parameter	Monthly Average	Daily Maximum
Oil and Grease, mg/L	100	100
Total Suspended Solids, mg/L	300	300
pH. S.U.	6 to 9	6 to 9
Temperature, ° F	150	150
Arsenic, mg/L	0.23	0.23
Cadmium, mg/L	0.15	0.15
Chromium, mg/L	2.0	2.0
Copper, mg/L	0.25	0.25
Cyanide, mg/ L	1.4	1.4
Lead, mg/L	0.14	0.14
Mercury, mg/L	0.0003	0.0003
Nickel, mg/L	1.8	1.8
Selenium, mg/L	0.2	0.2
Silver, mg/L	0.16	0.16
Zinc, mg/L	1.4	1.4

COMPARISON OF LIMITATIONS WITH THE EXISTING PERMIT MODIFICATION ISSUED
MARCH 14, 2000:

No change.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Condition S1. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S2 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges [WAC 273-216-110 and 40 Code of Federal Regulations (CFR) 403.12 (e), (g), and (h)].

OPERATIONS AND MAINTENANCE

The proposed permit contains condition S.3 as authorized under RCW 90.48.110, WAC 173-220-150, Chapter 173-230 WAC, and WAC 173-240-080. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

The Department has determined that the Permittee has a potential to cause pollution of the waters of the state from leachate of solid waste.

This proposed permit requires, under authority of RCW 90.48.080, that the Permittee develop and submit to the Department a solid waste plan to prevent solid waste from causing pollution of waters of the state.

GENERAL CONDITIONS

General Conditions are based directly on state laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending, or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes, or regulations. Conditions G7 and G8 relate to permit renewal and transfer. Condition G9 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G10 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G11 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for a period of five years.

REFERENCES FOR TEXT AND APPENDICES

United States EPA. *Technical Support Document for Water Quality-based Toxics Control*. EPA/505/2-90-001, March 1991.

APPENDICES

APPENDIX A -- PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on March 20, 2004, and March 27, 2004, in the *Chronicle* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on August 7, 2004 in the *Chronicle* to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 4:30 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Industrial Unit Permit Coordinator
Department of Ecology
Southwest Regional Office - Water Quality
P.O. Box 47775
Olympia, WA 98504-7775

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the 30-day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least 30 days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

The Department will consider all comments received within 30 days from the date of the PNOD indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone at (360) 407-6285, or by writing to the address listed above.

This permit was written by Gary Anderson, P.E.

APPENDIX B -- GLOSSARY

Ammonia -- Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Best Management Practices (BMPs) -- Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅ -- Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass -- The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards -- National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Class 1 Inspection -- A walk-through inspection of a facility that includes a visual inspection and some examination of facility records. It may also include a review of the facility's record of environmental compliance.

Class 2 Inspection -- A walk-through inspection of a facility that includes the elements of a Class 1 Inspection plus sampling and testing of wastewaters. It may also include a review of the facility's record of environmental compliance.

Composite Sample -- A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite" (collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots).

Construction Activity -- Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Daily Maximum Discharge Limitation -- The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Engineering Report -- A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample -- A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater -- Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference -- A discharge which, alone or in conjunction with a discharge or discharges from other sources, either: (1) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; or (2) therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal.

Local Limits -- Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Monthly Average -- The average of the measured values obtained over a calendar month's time.

Pass-through -- The discharge of pollutants through a municipal sewerage system into waters of the state in quantities or concentrations which are a cause or significantly contribute to a violation of any requirement of water quality standards for waters of the State of Washington, or of the NPDES permit or State waste discharge permit, including an increase in the magnitude or duration of the violation.

pH -- The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Significant Industrial User (SIU) -- Industrial dischargers to a POTW that have effluent limitations defined in a category (40 CFR 403.6 and 40 CFR chapter I, subchapter N). However, the control authority may make a determination that even though an industrial user belongs to a category that has effluent limits for pretreatment, that industry is not a significant industrial because there is no reasonable potential for affecting the POTW's operation. A SIU may also be any other industrial user that: 1. discharges an average of 25,000 gallons per day or more of process water, 2. makes up more than 5 percent of the average hydraulic flow (dry weather) or 5 percent of the organic capacity of the plant, or 3. the control authority believes has a reasonable potential to adversely affect the POTW's operation.

Slug Discharge -- Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters -- Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater -- That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit -- A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria -- A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids -- That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS) -- Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit -- A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C – RESPONSE TO COMMENTS

No comments were received.